

# Appendix XVI

## Radiological Incident Annex

### Introduction

The Coast Guard's jurisdiction as the Coordinating Agency<sup>1</sup> for a radiological incident is limited in both geographic area and authority and is specified in the National Response Plan.

Figure A, illustrates the two most important criteria (jurisdiction and terrorism) that determine the Coast Guard's role as either a Coordinating Agency or as a cooperating agency during a radiological incident.

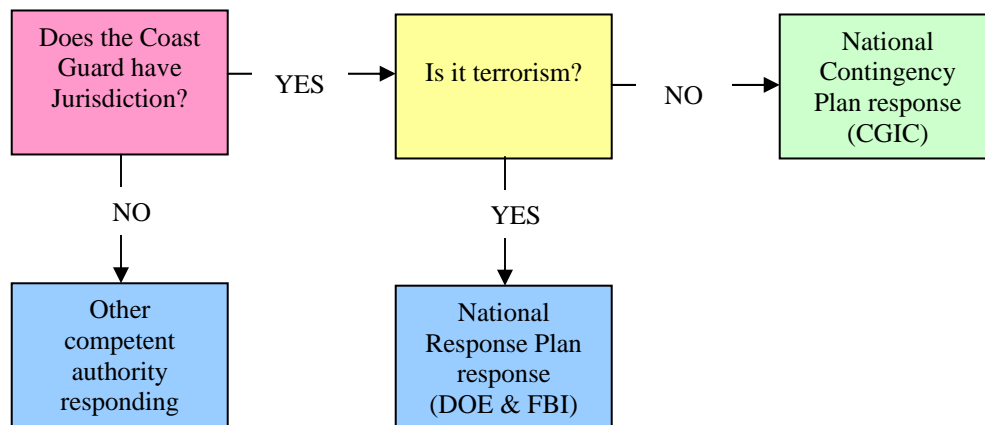


Figure A. In radiological incidents where the Coast Guard has jurisdiction and there is no involvement of terrorism the Coast Guard Incident Commander responds under the NCP. For any radiological incidents where terrorism is involved, the Department of Energy is the Coordinating Agency responding under the NRP and the Coast Guard is a cooperating agency.

### Purpose

The purpose of this Annex is to provide guidance to the Coast Guard Incident Commander (CGIC) and their Maritime Security and Area Committee partners in responding to radiological incidents that have actual, potential, or perceived radiological consequences.

A radiological incident involves the release or potential release of radioactive material that poses an actual or perceived hazard to public safety, national security and or the environment.

The role of the Coordinating Agency for radiological incidents in the maritime environment can reside with several different federal agencies depending on geographic location, accountability for the radiological source, and the suspected or actual involvement of terrorism.

<sup>1</sup> The Coordinating Agency is that Federal agency which owns, has custody of, authorizes, regulates, or is otherwise deemed responsible for the radiological facility or activity involved in the incident (NRP).

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#### Coast Guard Jurisdiction

The National Response Plan limits the Coast Guard's Coordinating Agency role for radiological incidents to "*certain areas of the coastal zone*" which is defined as radiological incidents that occur on:

- ❑ Any type of vessel,<sup>2</sup>
- ❑ Waters seaward of the shoreline to the outer edge of the Exclusive Economic Zone,<sup>3</sup> and,
- ❑ Specified waterfront facilities<sup>4</sup>
  - For the Captain of the Port Sector San Francisco, Los Angeles/Long Beach, San Diego these specified facilities are listed in the following link:  
[http://www.slc.ca.gov/Division\\_Pages/MFD/MFD\\_Home.htm](http://www.slc.ca.gov/Division_Pages/MFD/MFD_Home.htm)

The scope of incidents the Coast Guard Incident Commander will respond to are:

- ❑ Transportation of radioactive materials
  - Shipment of materials that are not licensed or owned by a Federal agency or Agreement State<sup>5</sup>
- ❑ Foreign, unknown or unlicensed material<sup>6</sup>
  - Incidents involving foreign or unknown sources of radioactive material or radioactive material which does not have appropriate licenses
- ❑ Space vehicles containing radioactive materials
  - Not managed by DOD or NASA (i.e. commercial satellite)

In addition to geographic limitations, the scope of the Coast Guard's jurisdiction as the Coordinating Agency is limited to those radiological incidents that do not involve a terrorist act.

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<sup>2</sup> Vessels as defined in 33 CFR 160.5. Exception: Department of Defense vessels.

<sup>3</sup> Exception: Department of Energy is the Coordinating Agency for radiological material shipped by or for them and for any nuclear weapon in their custody.

<sup>4</sup> Facilities regulated by 33 CFR 105, 126, 127, 128, 140, 154, 155, 156

<sup>5</sup> For non-agreement states such as New Jersey the Coast Guard is the Federal Coordinating Agency and will assist the state if necessary.

<sup>6</sup> **Foreign or unlicensed** source may be a reactor, a spacecraft containing radioactive material, imported radioactively contaminated material, or a shipment of foreign-owned radioactive material. **Unknown** sources of radioactive material, also termed "orphan sources" are those materials whose origin and/or radiological nature are not yet established. These types of sources include contaminated scrap metal or abandoned radioactive material. **Licensed material:** The Nuclear Regulatory Committee (NRC) issues licenses to operators and facilities under the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, as amended. "Licensed material" refers to byproduct, source or special nuclear material associated with these facilities regulated by the NRC. It is most likely that the only way to determine if something is a "Licensed Material" is by contacting the NRC or the Responsible Party (Source NRP).

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For any terrorist event involving non-Department of Defense or non-Nuclear Regulatory Committee (NRC) radioactive material, the Department of Energy (DOE) will assume the role of Coordinating Agency to address the radiological aspects of the response

#### **Using this Annex**

Notification of a possible or actual radiological incident can occur in several ways. To facilitate initial actions to be taken and to determine jurisdiction choose the link that matches your method of notification.

- ❑ Passive detection from radiation pagers (Level I)
- ❑ Intelligence source(s)
- ❑ Notification of a radiological release -- NCP response
- ❑ Actual terrorist incident involving radiation

#### **Passive Detection (Level I)**

A radiological incident may be first discovered while conducting routine operations in the port (discovery may be made by Customs and Border Protection) or through intelligence gathering. The guidance in the Unit's Radiological Response SOP will be used when Level I detection indicates the presence of a radiological source. Depending on the method of discovery and whether the incident is on a vessel or facility, the CGIC should make some initial determinations as to which Course of Action to take:

- ❑ **On a Vessel:** While on board a vessel (underway or moored), if a Level I Team detects either neutron or gamma radiation and has determined that the source is illegitimate or unknown, the Coast Guard Incident Commander, in consultation with the States, should determine the safest location for the vessel to be located. Safe location options are to:
  - If at sea, keep the vessel at sea
  - If vessel is transiting in the port or is moored, direct the vessel to a safe location. Options include: if moored remain at moorings, anchorage, or send out to sea. Take into account the following
    - Proximity to population centers
    - Critical infrastructure
    - Vessel traffic in the vicinity of suspect vessel
    - Ability to get teams on and off the vessel
    - Source is emitting neutrons (may indicate the presence of spent nuclear material)
    - Consult Port of Safe Refuge Document
- ❑ **On a Facility:** If a Level I Team detects either neutron or gamma radiation and has determined that the source is illegitimate or unknown while at a facility:
  - Determine whether to limit facility operations adjacent to the isolation perimeter established by the Level I Team

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- If source is emitting neutrons may indicate the presence of spent nuclear material (Note: Neutron sources rarely occur naturally and are usually produced in a reactor. Although they are generally associated with special nuclear material (SNM), there are some legitimate sources of neutron radiation).
- In conjunction with the Facility Security Officer evaluate the need to limit access into the facility or evacuate the facility

#### **For both vessels and facilities:**

If radiation source is illegitimate, unknown or exceeds the safe exposure limits for a Level I Team, the Level I Team is to notify the chain of command requesting Level II support. Upon receiving the request, the appropriate Coast Guard Sector Commander should consider the following:

- ❑ Deploy Level II Team to localize and characterize the radiation source.  
Level II resources:
  - Pacific Strike Team
  - Coast Guard Sector
  - Customs and Border Protection
- ❑ Notify local Field Intelligence Support Team (FIST)
- ❑ Contact the Coast Guard Investigative Service (CGIS) Liaison Agent to the Joint Terrorism Task Force (JTTF) to notify the local FBI Office when Level II Team is deployed
  - San Francisco
  - Los Angeles/Long Beach
  - San Diego
- ❑ If necessary, Level II Team to coordinate with CBP Laboratory Scientific Support (LSS).
  - National LSS radiological officer 24-hour number is:  
**(407) 975-1780.**

Notify the State Office of Emergency Services (CA OES) **(800) 852-7550**

- ❑ Determine need to shift to secure communications
- ❑ Consider establishing Safety/Security Zones
- ❑ Determine Safe to Respond
- ❑ If Level II Team cannot identify the source as legitimate, request assistance from the DOE Radiological Assistance Program (RAP) Team at the Oakland Area Office
  - Emergency number **(925) 422-8951**
  - Notify the National Response Center if RAP support requested
- ❑ Determine need to initiate Critical Incident Communications procedures

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#### **Intelligence Sources**

When the Coast Guard receives notification of possible intelligence regarding a potential radiological incident it is critical to determine if the intelligence is credible.

- Work with the FIST and CGIS to determine if threat is credible or non-credible
  - If credible, support the Department of Energy, which is the Coordinating Agency and the Federal Bureau of Investigation.
  - If not credible,
    - Does the Coast Guard have jurisdiction?
    - If yes, conduct follow-up to determine if there is public health threat

#### **Actual terrorist incident involving radiation**

In the event of an actual terrorist incident involving radiation the Coast Guard's role is as a cooperating agency using primarily the authorities of the Captain of the Port. Initial actions to be taken

- Initiate Critical Incident Communications procedures
- Account for all field deployed teams, individuals and assets
- If first federal on scene, implement the Terrorism Incident Annex until relieved by the Department of Energy

#### **Notification of a Radiological Release responded to under the National Contingency Plan**

This section of the Annex discusses non-terrorist radiological incidents where the Coast Guard has jurisdiction and where response operations are conducted under the National Contingency Plan.

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#### Unified Command Organization

The actual make-up of the Unified Command in response to a radiological incident conducted under the National Contingency Plan will depend on the incident location and complexity. Figure B lists potential agencies and entities that would most likely respond to a non-terrorist radiological incident in the Captain of the Port Sector San Francisco, Los Angeles/Long Beach or San Diego zone.

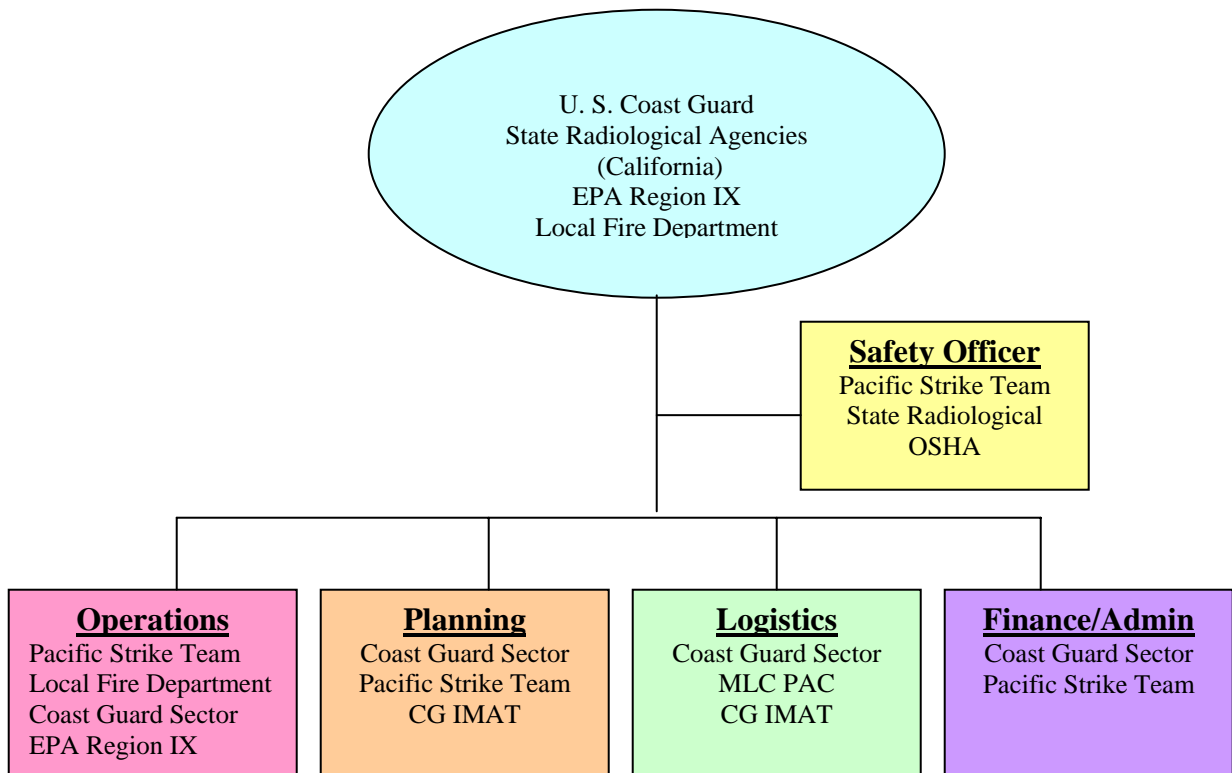


Figure B. The actual makeup of the Unified Command organization in response to a radiological incident will depend on incident location and complexity. The agencies and entities listed in the ICS organization chart represent those most likely to respond to a radiological incident under the National Contingency Plan in Captain of the Port Sector Delaware Bay zone.

For the Operations Section Chief, consider:

- ❑ Complexity of the incident
- ❑ Knowledge and experience in responding to radiological incidents
- ❑ Agency with the greatest jurisdiction, involvement, and statutory authority

#### Incident Commander/Unified Command Response Objectives

Incident Commanders/Unified Command should use this Annex in conjunction with the Base Plan when responding to a radiological incident in “certain areas of the coastal zone.”

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- ❑ Ensure the safety of responders through the use of radiation detection equipment and monitoring devices
- ❑ Establish incident site control zones (exclusion, contamination reduction zone, support zone) based on active surveillance:
- ❑ Determine the extent of the contamination
- ❑ Minimize the spread of contamination
- ❑ Isolate hazard from the public and non-responders
- ❑ Determine need to establish public health monitoring
- ❑ Stabilize the source
- ❑ Prevent the spread of radiological material from the incident site
- ❑ Implement effective communications with state Emergency Operations Centers
- ❑ Coordinate incident security
- ❑ Access Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) funding
- ❑ Ensure coordination of technical data (collection, analysis, storage, and dissemination)

#### **Safety Officer**

The two radiation concerns at an incident are exposure and contamination by radioactive material.

- ❑ List of hospitals capable of accepting radiation casualties:
  - San Francisco [SF ACP Section 5320]
  - Los Angeles/Long Beach [LALB ACP Section 5320]
  - San Diego [SD ACP Section 5320]
- ❑ Conduct active surveillance
  - Air monitoring
  - Visual
  - Ground truthing

Actions that can be taken to minimize exposure involve Time, Distance, and/or Shielding:

- ❑ Decrease the amount of TIME spent in close proximity to the radiation source.
- ❑ Keep as much DISTANCE away from the source as feasible
  - As a rule of thumb, every time you double the distance away from a radiological source, you reduce the exposure rate by four times.
- ❑ Use available means of SHIELDING to lower the amount of exposure to the source.

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#### **State Radiological Emergency Contacts**

California Office of Emergency Services (CA OES) **(800) 852-7550**

#### **Special Teams**

The following special teams are equipped to respond to radiological incidents, and should be considered as potential response resources:

- ❑ EPA Radiological Emergency Response Team (RERT)
- ❑ USCG Pacific Strike Team (PST) (415-883-3311)
- ❑ DOE Radiological Assessment Program (RAP) Team
- ❑ USACE Rapid Response
- ❑ NOAA Scientific Support Coordinator (206-526-4911)
- ❑ California 95<sup>th</sup> Civil Support Team (510-780-0683 Ext. 2238)

Additional special teams can be found in Section 4011.01 of the Region IX Regional Contingency Plan.